

REMARKS

In the Office Action, claims 1-9 and 11 were provisionally rejected for obviousness-type double patenting as being unpatentable over claims 1-22 of copending application serial no. 11/219,432, claims 1-25 of application serial no. 805,796, claims 1-18 of application serial no. 10/919,825, claims 32-49 of copending application serial no. 10/638,846 and claims 1-23 of copending application serial no. 10/697,211.

Claims 1-9 and 11 were rejected for obviousness type double patenting as unpatentable over claims 1-18 of U.S. Patent No. 6,783,538 and claims 1-29 of 6,793,665.

To expedite prosecution, submitted herewith is a Terminal Disclaimer obviating the double patenting rejections.

In response to the objection to the drawings for failure to meet formal requirements, submitted herewith are fourteen sheets of formal drawings. The objection to the drawings should consequently be withdrawn.

Claims 1-9 and 11 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The term "first" has been deleted from claim 1. In claim 18, the preamble has been changed to a method of implanting a vessel filter in a patient's body and subsequently removing it from the patient's body. Withdrawal of the rejection is respectfully requested.

Claims 1-4, 6, 7, 9, 11-14, 16 and 18 were rejected as anticipated by U.S. Patent No. 6,994,092 to Van der Burg et al. Claim 5 was rejected as obvious over van der Burg in view of U.S. Patent No. 6,443,972 to Bosma et al. and claims 8, 15 and 17 were rejected as obvious over van der Burg in view of U.S. Publication 2002/0058911 (Gilson).

The courtesy extended by Examiner Shaffer in the telephone conversation with the undersigned on October 17, 2006 is acknowledged with appreciation. During the telephone conversation the present invention and the Van der Burg reference were discussed.

The Examiner in his Office Action referred to Figure 33 of van der Burg. However, the arrows in that figure point to the loop. The undersigned pointed out during the phone conversation that van der Burg only discloses moving the distal hub. Van der Burg states:

Deployment line 240 extends in a loop 244 formed by a slip knot 242. As will be apparent from Fig. 33, proximal retraction on the deployment line 240 will cause the distal hub 191 to be drawn towards the proximal hub 222, thereby radially enlarging the cross-sectional area of the occlusion device 10. Depending upon the material utilized for the occlusion device 10, the supports 228 will retain the radially enlarged orientation by elastic deformation, or may be retained in the enlarged orientation such as by securing the slip knot 242 immovably to the deployment line 240 at the fully radially enlarged orientation. (col. 18, lines 10-21)

Thus, van der Burg does not disclose or suggest a filter wherein both converging ends are positioned radially and axially inwardly of the mounting section (claim 1) or a closer axial distance to the center (claims 12 and 18) to ensure particles are directed to the center of the filter by either orientation of the filter. Applicants submit that this is sufficient to distinguish over van der Burg, since as can be appreciated, van de Burg does not disclose two converging regions satisfying the recitation as the proximal hub would not move and remain to the right as viewed in Figure 33. The Examiner in the conversation mentioned that the proximal hub could be moved. Although Applicants disagree that this is taught or suggested in van de Burg, to expedite prosecution, as discussed, the claims have been amended to distinguish over the external force required by Van der burg. That is, the claims have further been amended to recite the absence of an external force.

More specifically, during the telephone conversation, the requirement in van der Burg of an external force, i.e. the loop 244, to pull the distal hub proximally was discussed. It was pointed out by the undersigned that the present invention did not require such force and automatically assumed this radially/axially inward configuration. To this end, claim 1 has been amended to recite the second configuration is achieved without application of an external force to the converging regions, claim 12 has been amended to recite movement to the second configuration without application of external force to the filtering sections and claim 18 has been amended to recite deployment without application of an external force.


Support for these amendments can be found throughout the drawings and specification where the filter is shown in both positions without additional force applied to the ends. For example, page 11 states that "[I]n use, once deployed, the filter moves from the collapsed position to Figure 1 ... to the expanded placement configuration of Figure 7." No outside force is applied. The use of the preferred material of shape memory material which enables the filter to automatically return toward the memorized position illustrates the automatic movement of the filter (see e.g. page 12 describing that once the filter is warmed, it returns toward its austenitic memorized position). Method drawings of Figures 22A-22C also evidence expansion without an external force.

In view of the foregoing, withdrawal of the rejection of claims 1, 12 and 18 as anticipated by van der Burg is respectfully requested. Claims 2-9 and 11 depend from claim 1 and claims 13-17 depend from claim 12 and are therefore believed patentable for at least the same reasons that claims 1 and 12 are believed patentable. Further, with respect to dependent claims 5, 8 15 and 17, neither Bosma nor Gilson satisfy the deficiencies of van de Burg.

Applicants respectfully submit that this application is now in condition for allowance. Prompt and favorable reconsideration of the present application is respectfully requested. The Examiner is invited to contact the undersigned should the Examiner believe it would expedite prosecution.

Respectfully submitted,

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